

**HOOSAC WATER
QUALITY DISTRICT**
NPDES Permit No. MA0100510

2021

ANNUAL REPORT



Hoosac Water Quality District

667 Simonds Road
Williamstown, Mass. 01267
Tel. 413-458-8423 Fax 413-458-5016
hwqd@hoosacwaterqualitydistrict.com

February 16, 2022

Justin Pimpare
Regional Pretreatment Coordinator
Environmental Protection Agency
5 Post Office Square
Suite 100 OEP 06-03
Boston, MA 02109

Director
MA Dept. of Environmental Protection
Bureau of Resource Protection
Western Regional Office
436 Dwight Street
Springfield, MA 01103

RE: HWQD's 2021 Annual Pretreatment Report
NPDES Permit No. MA0100510

Dear Director:

The Hoosac Water Quality District herewith submits its 2021 Annual Pretreatment Report for your consideration. The reporting period covered in this report is January 1, 2021 through December 31, 2021.

Contained in this report you will find a Table of Contents and five (5) attachments, (lettered A through E) for your review. This report is complete as required under regulations contained in Attachment C of our National Pollutant Discharge Elimination System Permit No. MA0100510.

If you have any question or comments, please contact the undersigned between the hours of 7:00 AM and 3:00 PM at (413)458-8423.

Sincerely,

Bradley O. Furlon
Chief Operator/District Manager

US EPA – EPA New England, Justin Pimpare
Via CERTIFIED MAIL – 7019 1120 0001 5436 6288

Hoosac Water Quality District
ANNUAL REPORT
January 1, 2021 – December 31, 2021

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August 2021
November 2021

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ATTACHMENT A

Narrative Description of
Pretreatment Program

Hoosac Water Quality District 2021 Annual Pretreatment Report

Narrative Description of Pretreatment Program

In order to assure submission of the Annual Pretreatment Report in a timely manner, this report will cover information collected from January 1, 2021 through December 31, 2021.

The Hoosac Water Quality District's Pretreatment Program is very effective in preventing plant interference and pass-through. As can be seen by observing the enclosed compost analyses summary, the District's compost continues to meet all criteria as set forth by the State of Massachusetts for a Type I compost in 310 CMR 32.01 through 310 CMR 32.14.

The results of the District's influent and effluent testing indicate there is no pass-through of metals or violations of the parameters for the Hoosic River, a Class B stream. Refer to Attachment D for these results.

Also enclosed is a summary of results for four (4) Acute & Chronic Toxicity Tests. These tests were prepared by New England Bioassay located in Manchester, CT. As can be seen, all criteria reported were well below the prescribed limits. Refer to Attachment E for these results.

The District has no Significant Industrial Users contributing waste to the facility. Previously the District had one (1) Significant Industrial User, which ceased operations in December of 2015. No SIU activities took place for the period of January 1, 201 through December 31, 2021.

The Hoosac Water Quality District's latest local limits were approved by the Environmental Protection Agency on May 18, 1999. A revised copy of the District's Pretreatment Ordinance was approved by EPA on May 2, 2011 in order to satisfy requirements made by the Streamlining Rule.

Although the District does not plan any staffing/funding changes, if conditions warrant (i.e. new SIU's, new programs proposed or new regulations passed) additional funds and/or staffing will be made available to ensure all phases of the Pretreatment Program are carried out as prescribed by these changes.

In summary, the HWQD is taking all steps necessary to ensure there is a complete and up-to-date Pretreatment Program in place and we thank you for the opportunity to present the information contained herein. If there are any questions concerning the information presented, please feel free to contact the District's Chief Operator, Bradley O. Furlon, at (413) 458-8423, Monday through Friday, between the hours of 7:30 AM and 3:00 PM.

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ATTACHMENT B

Report of
Compliance and
Enforcement Activities

EPA Region 1 Annual Pretreatment Report Summary Sheet

POTW Name:	Hoosac Water Quality District		
NPDES Permit #:	MA0100510		
Pretreatment Report Period Start Date:	January 1, 2021		
Pretreatment Report Period End Date:	December 31, 2021		
# of Significant Industrial Users (SIUs):	<input type="text" value="0"/>		
# of SIUs Without Control Mechanisms:	<input type="text" value="0"/>		
# of SIUs not Inspected:	<input type="text" value="0"/>		
# of SIUs not Sampled:	<input type="text" value="0"/>		
# of SIUs in Significant Noncompliance (SNC) with Pretreatment Standards:	<input type="text" value="0"/>		
# of SIUs in SNC with Reporting Requirements:	<input type="text" value="0"/>		
# of SIUs in SNC with Pretreatment Compliance Schedule:	<input type="text" value="0"/>		
# of SIUs in SNC Published in Newspaper:	<input type="text" value="0"/>		
# of SIUs with Compliance Schedules:	<input type="text" value="0"/>		
# of Violation Notices Issued to SIUs:	<input type="text" value="0"/>		
# of Administrative Orders Issued to SIUs:	<input type="text" value="0"/>		
# of Civil Suits Filed Against SIUs:	<input type="text" value="0"/>		
# of Criminal Suits Filed Against SIUs:	<input type="text" value="0"/>		
# of Categorical Industrial Users (CIUs):	<input type="text" value="0"/>		
# of CIUs in SNC:	<input type="text" value="0"/>		

Penalties

Total Dollar Amount of Penalties Collected \$ 0

of IUs from which Penalties have been collected: 0

Local Limits

Date of Most Recent Technical Evaluation of Local Limits: June 27, 2013

Date of Most Recent Adoption of Technically Based Local Limits: May 18, 1999

Pollutant	Limit (mg/l)	MAHL (lb/day)
Aluminum	161.6	427.35
Arsenic	0.31	0.67
Boron	1.01	2.20
Cadmium	0.09	0.28
Chromium	4.10	8.85
Copper	0.56	9.82
Cyanide	2.02	4.35
Lead	0.43	0.93
Mercury	0.0034	0.0073
Molybdenum	0.04	0.073
Nickel	4.89	11.29
Selenium	0.24	0.53
Silver	0.06	0.13
Zinc	6.04	13.06
Total Suspended Solids	100	N/A
Animal or Vegetable Fats, Oils, and Greases	100	N/A
Biological Oxygen Demand (BOD ₅)	100	N/A

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ATTACHMENT C

Compost Analyses Summary
January 1, 2021 – December 31, 2021

Priority Pollutant Scan

August 2021 Compost

TCLP

May 2021 Compost

PFAS

March 2021/June 2021/September 2021/December 2021

NOTICE AND NECESSARY INFORMATION

This form is to assist compliance with the bulk sewage sludge notification requirements [503.12(f)]. Please note however, that if the sewage sludge meets the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of sewage sludge to transmit information to land appliers and also to transmit information to land owners or lease holders.

PART I - To be completed by PREPARERS of sewage sludge

A. Please provide pollutant concentrations

H.W.Q.D.'s Pollutant Concentrations	Pollutant Concentrations (Table 3, 40 CFR 503.13) Monthly Average – mg/kg		Ceiling Concentrations (Table 1, 40 CFR 503.13) Daily Maximum – mg/kg		MA DEP 310 CMR Table 32.12(2)(a) Type I Sludge - Max. Allow. Conc. Parts Per Million Dry Weight	
	Arsenic	41	Arsenic	75	Arsenic	N/A
	Boron	N/A	Boron	N/A	Boron	300
	Cadmium	39	Cadmium	85	Cadmium	14
	Chromium	N/A	Chromium	N/A	Chromium	1000
	Copper	1500	Copper	4300	Copper	1000
Please See Table 2	Lead	300	Lead	840	Lead	300
	Mercury	17	Mercury	57	Mercury	10
	Molybdenum	N/A	Molybdenum	75	Molybdenum	40
	Nickel	420	Nickel	420	Nickel	200
	Selenium	100	Selenium	100	Selenium	N/A
	Zinc	2800	Zinc	7500	Zinc	2500

Sludge may not be land applied if any pollutant exceeds the following values:

- PCB's in Type I sludge which is a commercial fertilizer pursuant to 310 CMR 32.11 (6)
- PCB's in Type I sludge which is a soil conditioner pursuant to 310 CMR 32.11 (6)

B. Pathogen Reduction (40 CFR 503.32)

Please indicate the level achieved.

 X Class A Class B

C. Vector Attraction Reduction (40 CFR 503.33)

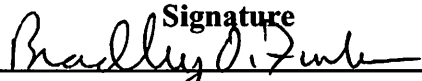
Please indicate the option performed.

 Option 1 Option 2 Option 3
 X Option 5 Option 6 Option 7
 No Vector Attraction Reduction options were performed.

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title	Area Code and Telephone Number
Bradley O. Furlon – Chief Operator/District Manager	(413) 458-8423

Signature	Date Signed
	2/16/22

HOOSAC WATER QUALITY DISTRICT
Compost Chart of Laboratory Analyses
JANUARY 1, 2021 THROUGH DECEMBER 31, 2021

PARAMETER	February 2021	<u>TCLP</u> May 2021	Priority Pollutant <u>Scan</u> August 2021	November 2021
METALS				
Antimony, Total (mg/kg)	-----	-----	0.669	-----
Arsenic, Total (mg/kg)	6.38	4.07	4.55	4.92
Beryllium, Total (mg/kg)	-----	-----	<0.0733	-----
Boron, Total (mg/kg)	20.8	20.9	21.6	20.9
Cadmium, Total (mg/kg)	3.63	2.22	1.75	1.95
Chromium, Total (mg/kg)	32.1	29.8	26.7	28.4
Copper, Total (mg/kg)	551	540	474	538
Lead, Total (mg/kg)	57.0	44.3	40.4	56.3
Mercury, Total (mg/kg)	1.30	0.772	1.5	1.68
Molybdenum, Total (mg/kg)	5.55	5.35	4.83	5.29
Nickel, Total (mg/kg)	15.0	13.4	11.9	15.6
Potassium, Total (mg/kg)	3,370	3,210	3,260	3,210
Selenium, Total (mg/kg)	7.35	7.26	5.72	5.66
Silver, Total (mg/kg)	-----	-----	3.55	-----
Thallium, Total (mg/kg)	-----	-----	3.18	-----
Zinc, Total (mg/kg)	737	633	629	607
INORGANICS & MISCELLANEOUS				
Solids, Total (%)	54.7	59.9	68.2	59.4
Solids, Total Volatile (%)	59.1	69.9	73.1	64.4
Cyanide, Total (mg/kg)	-----	-----	1.50	-----
pH (SU)	8.15	8.33	8.13	8.43
Nitrogen, Ammonia (mg/kg)	5,030	11,100	5,050	6,620
Nitrogen, Nitrate (mg/kg)	23.3	48.7	70.9	1.33
Nitrogen, Nitrate/Nitrite (mg/kg)	44.5	52.2	75.6	3.52
Nitrogen, Total (mg/kg)	46,600	45,000	41,900	50,900
Nitrogen, Total Kjeldahl (mg/kg)	46,600	44,900	41,800	50,900
Phosphorus, Total (mg/kg)	22,900	21,400	21,000	20,900
Phenolics, Total (mg/kg)	-----	-----	0.740	-----
Salmonella (MPN per 4 grams)	<0.12	<0.12	<0.39	<0.42

*August Salmonella testing was performed by Eurofins EMLab P&K. The test method used was outside the required testing limits so the District resampled, which was sent to Analytical Services, Inc to retest using the correct testing limits and the result came back within acceptable limits.

Hoosac Water Quality District
Laboratory Analyses for Compost
JANUARY 1, 2021 THROUGH DECEMBER 31, 2021

TCLP	
MAY 2021	
TCLP Volatile Organics	
All tests results were ND	
TCLP Semivolatile Organics	
All test results were ND	
TCLP Herbicides	
All test results were ND	
TCLP Pesticides	
All test results were ND	
TCLP Metals	
All test results were ND Except: Barium - 0.138 mg/L	

ND = NONE DETECTED

Hoosac Water Quality District
Laboratory Analyses for Compost
JANUARY 1, 2021 THROUGH DECEMBER 31, 2021

PRIORITY POLLUTANT SCAN (P.P.S.)

AUGUST 2021

Volatile Organics

All tests results were ND
Except:
2-Butanone - 91 ug/kg
Acetone - 570 ug/kg

Semivolatile Organics

All tests results were ND
Except:
Chrysene - 114 ug/kg
bis(2-Ethylhexyl)phthalate - 3540 ug/kg
3+4 Methylphenol - 2430 ug/kg

Pesticides

All tests results were ND

PCBs

All tests results were ND

ND = NONE DETECTED

COMPOST QUARTERLY PFAS TESTING
JANUARY 1, 2021 THROUGH DECEMBER 31, 2021

PFAS COMPOUND	March	June	September	December
METALS				
Perfluorobutanoic Acid/PFBA (ng/g)	12.6	11.1	9.56	7.57
Perfluoropentanoic Acid/PFPeA (ng/g)	12.5	6.41	4.56	6.03
Perfluorobutanesulfonic Acid/PFBS (ng/g)	36.2	19.5	10.8	14.6
Perfluorohexanoic Acid/PFHxA (ng/g)	52.8	30.3	23.2	24.8
Perfluoropentanesulfonic Acid/PFPeS (ng/g)	ND	ND	ND	ND
Perfluoroheptanoic Acid/PFHpA (ng/g)	4.76	3.04	1.73	2.11
Perfluorohexanesulfonic Acid/PFHxS (ng/g)	0.949	0.782	0.616	0.381
Perfluorooctanoic Acid/PFOA (ng/g)	25.4	15.0	9.12	9.11
Perfluorononanoic Acid/PFNA (ng/g)	3.80	2.08	1.23	1.50
Perfluorooctanesulfonic Acid/PFOS (ng/g)	18.3	13.9	8.04	9.56
Perfluorodecanoic Acid/PFDA (ng/g)	12.2	8.48	5.44	4.49
Perfluorononanesulfonic Acid/PFNS (ng/g)	ND	ND	ND	ND
Perfluoroundecanoic Acid/PFUnA (ng/g)	2.16	1.87	1.11	1.11
Perfluorodecanesulfonic Acid/PFDS (ng/g)	1.42	1.40	0.900	0.622
Perfluorododecanoic Acid/PFDoA (ng/g)	4.05	2.53	2.24	2.39
Perfluorotridecanoic Acid/PFTTrDA (ng/g)	0.839	1.15	ND	ND
INORGANICS & MISCELLANEOUS				
Solids, Total (%)	54.8	56.5	64.8	59.6

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ATTACHMENT D

Summary of
HWQD's Influent and Effluent

June 2021

Hoosac Water Quality District
Annual Influent and Effluent Testing Results
June 9, 2021

RAW INFLUENT		
Parameter	Raw Influent Composite Results (mg/L)	Raw Influent Grab Results (mg/L)
Aluminum	1.47	2.33
Arsenic	<0.0050	<0.0050
Boron	0.0823	0.0203
Cadmium	<0.0020	<0.0020
Chromium	<0.0020	0.0034
Copper	0.0566	0.0335
Cyanide	-----	<0.0100
Lead	<0.0030	<0.0030
Mercury	0.00023	<0.00020
Molybdenum	<0.0020	<0.0020
Nickel	<0.0050	<0.0050
Selenium	<0.0050	<0.0050
Silver	<0.0020	<0.0020
Zinc	0.0589	0.0418
Total Suspended Solids	-----	-----
Biochemical Oxygen Demand	-----	-----

FINAL EFFLUENT		
Parameter	Final Effluent Composite Results (mg/L)	Final Effluent Grab Results (mg/L)
Aluminum	0.370	0.409
Arsenic	<0.0050	<0.0050
Boron	0.0839	0.0779
Cadmium	<0.0020	<0.0020
Chromium	<0.0020	0.0028
Copper	0.0099	0.0146
Cyanide	-----	<0.0100
Lead	<0.0030	<0.0030
Mercury	<0.00020	<0.00020
Molybdenum	<0.0020	<0.0020
Nickel	<0.0050	<0.0050
Selenium	<0.0050	<0.0050
Silver	<0.0020	<0.0020
Zinc	0.0114	0.0186
Total Suspended Solids	<3.13	-----
Biochemical Oxygen Demand	2.58	-----

Hoosac Water Quality District
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ATTACHMENT E

Acute & Chronic Toxicity
Test Report Summary

February, 2021
May, 2021
August, 2021
November, 2021

Hoosac Water Quality District
Acute & Chronic Toxicity Testing Results
JANUARY 1, 2021 THROUGH DECEMBER 31, 2021

Limit NPDES Permit No. MA0100510	
LC50	C-NOEC
≥100%	≥18%

	LC50	C-NOEC
February 2021	>100%	100%
May 2021	>100%	100%
August 2021	>100%	100%
November 2021	>100%	100%